

REMARKS

Claims 1-22 are pending in the Application, all of which stand rejected by the Office Action mailed December 23, 2008. Claims 16 and 22 are amended by the present response. Claims 1, 16, and 22 are independent claims. Claims 2-15 and 17-21 depend from independent claims 1 and 16, respectively.

Applicant respectfully requests reconsideration of pending claims 1-22, in light of the following remarks.

Rejections of Claims

Claims 1, 16, and 22 stand rejected on the ground of nonstatutory double patenting over claims 1 and 18 of U.S. Patent No. 7367027 B1 and claims 1, 16, and 26 of U.S. Patent No. 7313791 B1.

Claims 16 and 22 stand rejected under 35 U.S.C. § 101, on the ground that the claimed invention is directed to non-statutory subject matter.

As best Applicant can discern, claims 1-15 stand rejected under 35 U.S.C. §102(a) as being anticipated by Criss *et al.* (US 2001/0029178 A1, hereinafter "Criss"). The Office Action at one point states that Peleg (US 6,546,552, hereinafter "Peleg") anticipates these claims, but then only refers to Criss in its discussion of those anticipation rejections. (See Office Action at p. 11-12.) However, Applicant notes that the rejections are asserted to be "new" by the Office Action, but in fact, previous Office Actions have asserted Criss as anticipating these claims, only to later acknowledge that Criss does not anticipate.

Claims 16-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Criss in view of Peleg.

Applicant respectfully traverses the rejections for the reasons set forth during prior prosecution, and in addition, those set forth below. Applicant notes that, once again, as with previous submissions, the Office Action largely fails to address the previous arguments by the Applicant. For example, the Office Action states, "Applicant's arguments with respect to claims 1-22 have been considered but are moot

in view of new grounds of rejection." (Office Action at p. 10). Yet, in large part, the Office Action then relies on previous grounds of rejection. As Applicant has previously addressed many of these issues, the arguments in whole will not be repeated in this submission, including, for example, shortcomings in the teachings of the Criss and Peleg references. Applicant maintains its previous traversals of the previously asserted grounds of rejection, and expressly reserves its right to challenge the assertions made in the Office Action.

I. Claims 1, 16, and 22 Are Not Unpatentable For Nonstatutory Double Patenting

Claims 1, 16, and 22 stand rejected for nonstatutory double patenting over claims 1 and 18 of U.S. Patent No. 7,367,027 and claims 1, 16, and 26 of U.S. Patent No. 7,313,791. The Office Action does not provide an explanation of those rejections beyond a table listing the language of those claims with portions underlined, and a statement that "underlined areas are reciting equivalent or identical or conveying same ideas in limitations in different words among the claims." (See Office Action at p. 2-3.) Applicant respectfully traverses those rejections. For example, claim 1 recites a mobile services network comprising, *inter alia*, "wherein generating comprises predicting the contents of locations in the new version of firmware and identifying as nodes corresponding locations in an old version of firmware for the mobile electronic device and a new version of firmware for the mobile electronic device, for which contents of the location in the new version of firmware was not able to be predicted based upon the old version of firmware." Applicant respectfully submits that the asserted claims of the cited patents do not disclose at least this aspect of claim 1. Further, the Office Action merely underlines certain portions of claims from the relied upon patents without providing any identification of which portions of the cited patents relate to any given portion of the subject matter of claim 1, and the Office Action fails to provide any explanation or rationale as to how or why any of the underlined portions are "equivalent or identical or conveying same ideas in limitation in different words among the claims." As such, Applicant respectfully submits that the Office Action falls far short of meeting its burden to present a *prima facie* case of obviousness.

In any event, the underlined portions of the cited patents relied upon by the Office Action in rejecting claim 1 are listed below:

- memory in an electronic device [utilizing] source and target images of the contents
- at least one processor communicatively coupled to storage containing code executable by the at least one processor
- a parser for generating distance files comprising distance information representing location differences between code or objects in the source image [and] the target image
- generating bubble information from the distance information
- representing addition and deletion of memory space within the source image to more closely align the code or objects in the source and target images
- a generator for generating at least one update packages package from the modified source image and the target image, for processing in the electronic device to update the memory
- an electronic device including an update environment arranged to first process data representative of shifting of object within [the existing code version] to align with locations of corresponding objects in an updated code version, the first process producing a modified existing code version, and to second process the modified existing code version to produce the updated code version
- distribution environment for transferring data to the electronic device

(See Office Action at p. 2-4.) Applicant respectfully submits that the above cited portions are silent with respect to predicting the contents of locations in the new version of firmware and identifying as nodes corresponding locations in an old version of firmware for the mobile electronic device and a new version of firmware for the mobile electronic device, for which contents of the location in the new version of firmware was not able to be predicted based upon the old version of firmware, as claimed. Again, the Office Action offers no explanation how any of those relied upon elements teach, suggest, or otherwise render obvious such prediction and identification of nodes as claimed. With regard to claims 16 and 22, Applicant notes that claim 16 recites, *inter alia*, "wherein determining comprises predicting the contents of locations in the new version of firmware and identifying as nodes corresponding locations in the old image of firmware and the new image of firmware for which contents of the location in the new image of firmware was not able to be predicted based upon the old image of firmware." Also, claim 22 recites, *inter alia*, "wherein determining comprises predicting the contents of locations in the new version of firmware and identifying as nodes corresponding locations in the old image of firmware and the new image of firmware for which contents of the location in the new image of firmware was not able to be predicted based upon the old image of firmware." Applicant respectfully submits that the Office Action fails to present a *prima facie* case of obviousness with respect to at least these aspects of claims 16 and 22. Again, the Office Action fails to correlate the underlined aspects of the cited patents to any given aspect of the claimed subject matter of claims 16 or 22, or explain how any of the underlined aspects of the cited patents disclose anything with respect to predicting, let alone teach, suggest, or otherwise render obvious the claimed subject matter of claims 16 and 22. Applicant therefore respectfully submits that, for at least the above discussed reasons, the Office Action fails to present a *prima facie* case of obviousness, and that the pending claims are not unpatentable for non-statutory double patenting.

II. Claims 16 and 22 Are Allowable Under 35 U.S.C. §101

Claims 16 and 22 stand rejected under 35 U.S.C. § 101, on the ground that the claimed invention is directed to non-statutory subject matter. (See Office Action at p. 9.) The Office Action asserts,

Claims 16 and 22 are drawn to "method" *per se*, as recited in the preamble, are not tied to another statutory class (such as a particular apparatus) and as such are non-statutory subject matter. See MPEP § 2106.IV.B.

Based on Supreme Court precedent and recent Federal Circuit decisions, a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. If neither of these requirements is met by the claim, the method is not a patent eligible process under § 101 and should be rejected as being directed to a non-statutory subject matter.

* * * * *

Claims 16 and 22 comprise elements (such as generating, determining, and outputting) that show how a process is performed, but they do not show what physical element performs the process (mobile terminal, server, memory, base station, MSC, etcetera...). Thus, claims 16 and 22 are not tied to another statutory class (such as a particular apparatus).

(*Id.* at p. 9-10.) Applicant respectfully traverses the rejection of claims 16 and 22, and respectfully submits that these claims are sufficiently tied to another statutory class and/or transform underlying subject matter sufficiently to satisfy the requirements of 35 U.S.C. § 101.

For example, each of claims 16 and 22 expressly recite "images" of firmware. Applicant respectfully submits that these images of firmware, which are used in claims 16 and 22 to generate an update package, would be understood as physical structures (i.e., apparatus) by one skilled in the art, and would sufficiently tie the method claims of 16 and 22 to another statutory class. (See MPEP § 2106.01: "When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be

realized.”) Further, claims 16 and 22 have been amended to further clarify that the update package that is generated is stored in a computer readable medium. (Applicant respectfully submits this aspect of claims 16 and 22 was previously implicit in the claims, and further that these amendments do not add new matter. Additional support may be found, for example, in the specification at ¶¶ 18-24 and 41.) Thus, claims 16 and 22 recite both firmware images that are used, and update packages that are generated and stored on a computer readable medium, which sufficiently tie the methods of those claims to a statutory class.

Further, Applicant respectfully submits that claims 16 and 22 also transform underlying subject material, and satisfy 35 U.S.C. § 101 for this additional reason as well. For example, each of claims 16 and 22 generate an update package that is stored on a computer readable medium. Applicant respectfully submits that such generation and storage of an update package would necessarily transform the computer readable medium onto which the update package is stored. Further still, for example, claim 22 recites “creating a partially modified old image of the firmware utilizing the first filter” and “creating a modified old image of the firmware utilizing the second filter and the partially modified old image of the firmware.” Applicant respectfully submits that such modifications of firmware images also transform those images.

For at least the above listed reasons, Applicant respectfully submits that claims 16 and 22 satisfy the requirements of 35 U.S.C. § 101, and requests the withdrawal of the rejections of those claims on that basis.

III. Criss Does Not Anticipate Claims 1-15

The Office Action asserts that Criss discloses “wherein generating comprises predicting the contents of locations in the new version of firmware and identifying as nodes corresponding locations in an old version of firmware of the mobile electronic device and a new version of firmware for the mobile electronic device, for which

contents of the location in the new version of firmware was not able to be predicted based upon the old version of firmware," providing its purported basis as follows:

(fig. 1, 5, 7; ¶ 52, 54-57, 74; Criss et al. teaches the update packages either requested by user of mobile device or by the mobile device is able to determine, by information given by administrator, what fields it needs on the update package and whether fields need to be deleted, added or modified, hence, Nodes are predicted and determined at mobile terminals memory and also at comparison made with new firmware as to identifiers showing differences between old version and new is presented at the header of packet in a compressed form) and a new version of firmware for the mobile electronic device (¶: 52, 54-57, Criss et al. teaches new version of firmware for mobile electronic device is available when it is determined that mobile electronic device needs the updated new version of firmware), for which contents of the location in the new version of firmware was not predicted based upon the old version of firmware (¶: 74, 75, Criss et al. teaches information concerning differences in address of data packets that need to be updated through new version firmware package in a compress form included in the header of package, hence, "prediction" or, in other words, address stack identifier are presented in the header in compress form, since these locations are new they are not based upon the old version of firmware, furthermore, the location of contents in new version of firmware would be different that of the old version of firmware, hence, new firmware and it would not be predicted by old version of firmware).

(See Office Action at p. 11-12.) Applicant respectfully traverses this rejection. Again, much of the cited portions of Criss have been relied upon previously in the prosecution of the present application. Thus, as an initial matter, Applicant re-iterates its previous submissions regarding shortcomings in the teachings of Criss. Applicant further notes that the Office Action does not assert Criss discloses "...was not able to be predicted..." but instead merely "was not predicted." Thus, even if accepted, *arguendo*, and taken at face value, the Office Action's assertions fail to provide a *prima facie* case of anticipation. Applicant respectfully submits there is a significant difference between not predicting at all on the one hand, and, on the other hand, predicting some aspects

but not being able to predict other aspects. In any event, Applicant further submits that a mere disclosure of "determin[ing], by information given by administrator, what fields it needs on the update package and whether fields need to be deleted, added or modified" as asserted by the Office Action does not anticipate the presently claimed subject matter, as merely determining what fields would be needed is quite different from the predicting as claimed. Even further still, as also noted in previous submissions, Applicant again notes that the asserted "fields it needs on the update package and whether fields need to be deleted, added or modified" are quite different from, and do not disclose, predicting the contents of locations in the new version of firmware, as claimed.

In any event, an examination of the cited portions of Criss confirms that Criss does not anticipate the presently claimed subject matter. The first cited portion of Criss reads as follows:

[0052] Accordingly, when a system operator wishes to change the operating software of one or more mobile terminals 36 within the system 20, the system operator loads the upgraded software into the FTP server 31 as discussed below. Included with each version of operating software is a unique identifier indicative of the particular version. The system administrator also updates the host computer to correspondingly reflect the modifications to the current software loaded in the FTP server. In particular, the system administrator updates the host computer with sufficient information to communicate those fields provided in the package definition files discussed below with respect to FIGS. 5a-5d. Then, when a mobile terminal 36 is next queried by the host computer regarding which version of operating software is being run, the mobile terminal 36 will be informed by the host computer 30 that the FTP server 31 has an upgraded version causing the mobile terminal 36 to request that the upgraded operating software be downloaded from the FTP server 31.

This paragraph thus discloses that the operating software of one or more mobile terminals may be updated, that fields provided in package definition files are communicated to a host computer, a mobile terminal will be informed by the host

computer that a server has an upgraded version, and the mobile terminal requests upgraded operating software. This cited portion of Criss is utterly silent with respect to predictions of any kind, let alone predicting the contents of locations in a new version of firmware, further still let alone the generating recited by claim 1.

The next cited portions of Criss, namely [0054] – [0057], read as follows:

[0054] Each mobile terminal 36 also includes a memory 50 for storing program code executed by the processor 40 for carrying out the functions described herein. In particular, the memory 50 includes a non-volatile portion (e.g., an EEPROM) for storing mobile terminal operating software which is executed by the processor 40 in order to carry out the desired operations of the mobile terminal 36. The particular operating software is not critical to the invention and it will suffice to say that such operating software typically will be related to the application of the mobile terminal, e.g., communication protocols, utility programs such as for inventory control, patient care, etc. As noted above, however, it may be desirable at times to upgrade such operating software with revised and/or completely different software. Thus, the memory 50 also has stored therein code which is executed by the processor 40 in order to perform the functions described below in relation to FIGS. 7(a)-7(i) and FIGS. 15(a)-15(b) for downloading upgraded software from the FTP server 31. The actual code for performing such functions can be easily programmed by a person having ordinary skill in the art of computer programming in any of a number of conventional programming languages based on the disclosure herein. Consequently, further detail as to the particular code itself has been omitted for sake of brevity.

[0055] As is described below in more detail in connection with FIGS. 7(a)-7(i) and FIGS. 15(a)-15(b), the processor 40 also stored in the memory 50 information relating to the version of mobile terminal operating software stored therein. The processor 40 is programmed to download operating software from the FTP server 31 if the update indicia received from the host computer 30 indicates that the FTP server 31 has stored therein more current versions of the operating software. If the processor 40 does download current versions of operating software, the processor 40, in

one embodiment, goes on to replace the previous operating software which was stored in the memory 50 with the upgraded operating software obtained from the FTP server 31.

[0056] Each mobile terminal 36 also includes its own RF transceiver section 54 connected to the processor 40. the RF transceiver section 54 includes an RF receiver 56 which receives RF transmissions from a base station 26, 28 via an antenna 58 and demodulates the signal to obtain the digital information modulated therein. An example of a suitable RF receiver 56 for use in the mobile terminal 36 (as well as the base stations 26, 28) is the Model 025 Direct Sequence Spread Spectrum Radio Module, which is commercially available from Aironet Wireless Communications, Inc. of Akron, Ohio.

[0057] The RF transceiver section 54 also includes an RF transmitter 60. In the event the mobile terminal 36 is to transmit information to the back one 24 in response to an operator input at input device 42 or as part of its boot-up routine, for example, the processor 40 forms digital information packets which are then delivered to the RF transmitter 60. According to conventional techniques, the RF transmitter 60 transmits an RF signal with the information packets modulated thereon via the antenna 58 to the base station 26 with which the mobile terminal 26 is registered.

Thus, these cited paragraphs discuss, for example, storage and execution of code on a mobile terminal, downloading operating software if update indicia indicates a more current version is stored on an FTP server, and RF transmissions between mobile terminals and a base station. Applicant respectfully submits such a disclosure is similarly utterly silent with respect to predicting the contents of locations in the new version of firmware, let alone the generating as claimed by claim 1, and that these paragraphs of Criss do not remedy the shortcomings of the other cited portions of Criss.

Turning to the final portions of Criss relied upon with respect to these aspects of claim 1, the Office Action relies upon [0074]-[0075] as teaching "for which contents of the location in the new version of firmware was not predicted based upon the old version of firmware." As an initial matter, Applicant again notes that claim 1 recites,

inter alia, "...for which contents of the location in the new version of firmware was not able to be predicted based upon the old version of firmware." Applicant again respectfully submits that not being able to be predicted as claimed in the context of claim 1 is quite different, and patentably distinct, from not predicting at all. Further still, Applicant submits that Criss cannot disclose "...was not able to be predicted..." as claimed because Criss, as discussed above, fails to teach the claimed prediction in the first place. In any event, [0074]-[0075] of Criss read as follows:

[0074] Following receipt of the Version Response Packet 124, the host computer 30 performs a comparison between the version indicator stored in the version indicator field 127 and the version of the corresponding operating software stored in the FTP server 31. Once the host computer 30 completes its comparison, the host computer 30 transmits a File Name Packet 128 to the mobile terminal 36 as shown in FIG. 7(e). The File Name Packet 128 includes a header 129, and a comparison result field 133. In the event the comparison performed by the host computer 30 showed that the version of operating software stored in the mobile terminal 36 is the same as the latest version of corresponding operating software stored at the FTP server 31, the host computer 30 includes indicia in the comparison result field 133 indicating that no update is needed. In the present embodiment, when the versions are identical, the host computer 30 includes the version of the operating software in the comparison result field 133. Thus, upon receipt of the File Name Packet 128, the mobile terminal 36 is able to discern that no additional downloading of operating software is necessary.

[0075] If, on the other hand, the host computer 30 determines from its comparison that the version of operating software stored in the mobile terminal 36 does not match the version of operating software stored by the FTP server 31, the host computer 30 includes in the comparison result field 133 the file name of the file to be downloaded from the FTP server 31. Alternatively, in another embodiment, the comparison result field 133 may include the contents of the package definition file for the corresponding package name (FIGS. 5a-5d). By providing the mobile terminal 36 with the contents of the package definition file, the mobile terminal 36 is informed not only that updated operating software is to be

downloaded, but also the required memory, file transfer mode, memory paths, file types, etc. as discussed above with respect to FIGS. 5a-5d.

Applicant respectfully submits this portion of Criss similarly fails to disclose the asserted aspects of claim 1. The “differences” and “comparison” of Criss fails for a number of reasons to disclose the presently claimed subject matter. First, the “header” and “comparison result field,” for example, of the cited portions of Criss relate to a file name packet that shows whether the version of software is the same, and do not relate to specific contents of the software, let alone to predicting the contents of locations in the new version of firmware. Further, merely performing “a comparison between the version indicator stored in the version indicator field 127 and the version of the corresponding operating software stored in the FTP server 31” does not teach anything with regard to the specific contents of locations in the new version of firmware as claimed. Predicting contents of locations in a new version of firmware is quite different from comparing a version indicator (which is part of a Version Response Packet 124 (*see* Criss at [0073]).) Similarly, as such a disclosure does not teach anything with respect to predicting the content of locations in the new version of firmware, such a disclosure also fails to teach “for which contents of the location in the new version of firmware was not able to be predicted based upon the old version of firmware” as claimed, regardless of whether or not the version indicators were different. Applicant respectfully submits that the relied upon portions of Criss relate to a comparison of version indicators that are not contents in a new version of firmware, and only to a comparison of whether a version of software is different and not to comparisons of contents of locations in a new version of firmware, let alone to predicting contents of locations in a new version of firmware.

For at least the reasons discussed above and in previous submissions, Applicant respectfully submits that the Office Action does not present a *prima facie* case of anticipation of claim 1 and claims 2-15 that depend from claim 1. Applicant further respectfully submits that those claims are allowable over Criss and requests the withdrawal of the rejections of those claims.

IV. The Proposed Combination Of Criss And Peleg Does Not Render Claims 16-22 Unpatentable

With regard to amended independent claims 16 and 22, Applicant respectfully submits that claims 16 and 22 recite certain limitations similar to those of claim 1, including "...predicting the contents of locations in the new version of firmware..." Applicant respectfully submits that the present Office Action does not identify Peleg as disclosing the above discussed shortcomings of Criss, set forth above. Therefore, Applicant respectfully submits that claims 16 and 22 are allowable over the proposed combination of references, for at least the reasons set forth above. Because claims 17-21 depend from claim 16, Applicant respectfully submits that claims 17-21 are also allowable, for at least the same reasons.

As an example of additional reasons for the allowability of claims 16 and 22, Applicant respectfully submits that claim 22 is further allowable because the cited art does not teach, suggest, or otherwise render obvious a method for generating an update package including, *inter alia*, "generating information for a first filter", "creating a partially modified old image of the firmware utilizing the first filter", and "generating information for a second filter." As an initial matter, Applicant notes that the Office Action cites to the same portions of Criss and provides the same rationale for the disclosure of both "generating information for a first filter" and "generating information for a second filter." (See Office Action at p. 20.) However, because the first and second filter are different, and are utilized differently as claimed, Applicant respectfully submits as a general principle that the same cited disclosure cannot teach both. The Office Action does not provide any explanation for how the asserted "comparing old and new firmware..." could disclose generating information for both the first and second filters as claimed (even if assuming, *arguendo*, such a disclosure would even disclose generating one of the filters as claimed). In any event, Applicant further notes that the Office Action merely repeats the recited claim elements "creating a partially modified old image of the firmware utilizing the first filter", "creating a modified old image of the firmware utilizing the second filter and the partially modified old image of the firmware", "generating the update package" and "outputting the generated update package" without identifying any

portion of the cited art or providing any explanation of how the cited art would teach, suggest, or otherwise render obvious those aspects of the presently claimed subject matter. Applicant respectfully submits, therefore, that the Office Action fails to establish a *prima facie* case of obviousness for at least "generating information for a first filter" and "generating information for a second filter", as well as, for example, "creating a partially modified old image of the firmware utilizing the first filter" and "creating a modified old image of the firmware utilizing the second filter and the partially modified old image of the firmware" as claimed. As such, Applicant respectfully submits that these are additional reasons that the Office Action has not presented a *prima facie* case of obviousness for claim 22.

Accordingly, Applicant respectfully requests that the rejections of claims 16-22 be reconsidered and withdrawn.

Conclusion

In general, the Office Action makes various statements regarding the pending claims and the cited references that are now moot in light of the above. Thus, Applicant will not address such statements at the present time. However, Applicant expressly reserves the right to challenge such statements in the future should the need arise (e.g., if such statements should become relevant by appearing in a rejection of any current or future claim).

The Applicant believes that all of the pending claims are in condition for allowance. Should the Examiner disagree or have any questions regarding this submission, the Applicant invites the Examiner to telephone the undersigned at (312) 775-8000.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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